

Docket No.: 67161-134

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                          |   |   |
|--------------------------|---|---|
| In re Application of     | : | Customer Number: 20277                            |
|                          | : |   |
| Koyu ASAI, et al.        | : | Confirmation Number:                              |
|                          | : |   |
| Serial No.:              | : | Group Art Unit:                                   |
|                          | : |   |
| Filed: December 03, 2003 | : | Examiner: Unknown                                 |
|                          | : |   |
| For:                     |   | INTERCONNECTION STRUCTURE OF SEMICONDUCTOR DEVICE |

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop IDS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

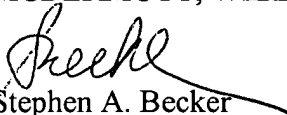
The relevance of the references listed on attached Form 1449 is discussed in the present specification.

**Serial No.:**

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

  
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**Date: December 3, 2003**

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| INFORMATION DISCLOSURE<br>CITATION IN AN<br>APPLICATION<br><br>(PTO-1449) |             | ATTY. DOCKET NO.<br><b>67161-134</b>   |                                | SERIAL NO.   |   |                            |
|   |             | APPLICANT<br><b>Koyu ASAI, et al.</b>  |                                |  |   |                            |
|   |             | FILING DATE<br><b>December 03, 2003</b>  |                                | GROUP  |   |                            |
| U.S. PATENT DOCUMENTS   |             |  |                                |  |   |                            |
| EXAMINER'S<br>INITIALS  | CITE<br>NO. | Document Number<br>Number-Kind Code <sup>2</sup> (if known)  | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited<br>Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |                            |
|   |             | US   |                                |  |   |                            |
|   |             | US   |                                |  |   |                            |
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| FOREIGN PATENT DOCUMENTS  |             |  |                                |  |   |                            |
| EXAMINER'S<br>INITIALS  | CITE<br>NO. | Foreign Patent Document<br>Country Codes -Number 4 -Kind<br>Codes (if known)   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages,<br>Columns, Lines<br>Where Relevant<br>Figures Appear                    | Translation<br><br>Yes No  |
|   |             | JP 7-106323  | 04/21/1995                     | NEC CORP   |   | (Japan w/English Abstract) |
|   |             | JP 9-213800  | 08/15/1997                     | NEC CORP   |   | (Japan w/English Abstract) |
|   |             | JP 8-264647  | 10/11/1996                     | FUJITSU LTD  |   | (Japan w/English Abstract) |
|   |             |  |                                |  |   |                            |
|   |             |  |                                |  |   |                            |
| OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)          |             |  |                                |  |   |                            |
| EXAMINER'S<br>INITIALS  | CITE<br>NO. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |                                |  |   |                            |
|   |             | "Stress-Induced Voiding Under Vias Connected to Wide Cu Metal Leads", E.T. Ogawa et al., 2002 IEEE International Reliability Physics Symposium Proceedings, April 7-11, 2002.  |                                |  |   |                            |
|   |             | "Mechanisms of Stress-Induced Voids in Multi-Level Cu Interconnects", Byung-Lyul Park et al., IEEE 2002 International Interconnect Technology Conference, June 3-5, 2002.  |                                |  |   |                            |
|   |             | "Thermal Stress of 140nm-width Cu damascene interconnects", Norio Okada et al., IEEE 2002 International Interconnect Technology Conference, June 3-5, 2002.  |                                |  |   |                            |
| EXAMINER  |             | DATE CONSIDERED  |                                |  |   |                            |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.